
Sequence Listing was accepted.

If you need help call the Patent Electronic Business Center at (866) 217-9197 (toll free).

Reviewer: Durreshwar Anjum

Timestamp: [year=2009; month=9; day=3; hr=8; min=50; sec=40; ms=281;]

Validated By CRFValidator v 1.0.3

Application No: 10539402 Version No: 2.0

Input Set:

Output Set:

Started: 2009-09-01 16:50:17.498

Finished: 2009-09-01 16:50:21.960

Elapsed: 0 hr(s) 0 min(s) 4 sec(s) 462 ms

Total Warnings: 60

No. of SeqIDs Defined: 162

Actual SeqID Count: 162

Total Errors:

Error code		Error Description
W	402	Undefined organism found in <213> in SEQ ID (1)
W	402	Undefined organism found in <213> in SEQ ID (2)
W	402	Undefined organism found in <213> in SEQ ID (3)
W	402	Undefined organism found in <213> in SEQ ID (4)
W	402	Undefined organism found in <213> in SEQ ID (73)
W	402	Undefined organism found in <213> in SEQ ID (74)
W	213	Artificial or Unknown found in <213> in SEQ ID (109)
W	213	Artificial or Unknown found in <213> in SEQ ID (110)
W	213	Artificial or Unknown found in <213> in SEQ ID (111)
W	213	Artificial or Unknown found in <213> in SEQ ID (112)
W	213	Artificial or Unknown found in <213> in SEQ ID (113)
W	213	Artificial or Unknown found in <213> in SEQ ID (114)
W	213	Artificial or Unknown found in <213> in SEQ ID (115)
W	213	Artificial or Unknown found in <213> in SEQ ID (116)
W	213	Artificial or Unknown found in <213> in SEQ ID (117)
W	213	Artificial or Unknown found in <213> in SEQ ID (118)
W	213	Artificial or Unknown found in <213> in SEQ ID (119)
W	213	Artificial or Unknown found in <213> in SEQ ID (120)
W	213	Artificial or Unknown found in <213> in SEQ ID (121)
W	213	Artificial or Unknown found in <213> in SEQ ID (122)

Input Set:

Output Set:

Started: 2009-09-01 16:50:17.498 **Finished:** 2009-09-01 16:50:21.960

Elapsed: 0 hr(s) 0 min(s) 4 sec(s) 462 ms

Total Warnings: 60
Total Errors: 0

No. of SeqIDs Defined: 162
Actual SeqID Count: 162

Error code		Error Description										
W	213	Artificial or Unknown found in <213> in SEQ ID (123)										
W	213	Artificial or Unknown found in <213> in SEQ ID (124)										
W	213	Artificial or Unknown found in <213> in SEQ ID (125)										
W	213	Artificial or Unknown found in <213> in SEQ ID (126)										
W	213	Artificial or Unknown found in <213> in SEQ ID (127)										
W	213	Artificial or Unknown found in <213> in SEQ ID (128) This error has occured more than 20 times, will not be displayed										

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<110> UNGER, CHRISTINE MARGARETE
     BESTE, GERALD
     ZEHETMEIER, CAROLIN
     LAIN, BLANCA
     TORELLA, CLAUDIA
     NIEWOHNER, JENS
     JAY, DANIEL G.
     EUSTACE, BRENDA K.
     KNAUER, ROLAND
     JENSEN, KRISTIAN HOBOLD
<120> NEUROPILIN-1 INHIBITORS
<130> MXI-352US
<140> 10539402
<141> 2005-12-22
<150> PCT/EP2003/014756
<151> 2003-12-22
<150> EP 03000615.9
<151> 2003-01-15
<150> 60/435,893
<151> 2002-12-20
<160> 162
<170> PatentIn version 3.5
<210> 1
<211> 269
<212> PRT
<213> Mus sp.
<400> 1
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              5
                                 10
                                                   15
Leu Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Thr Val Thr Ser Tyr
         20 25
Asp Ile Asn Trp Val Lys Gln Arg Pro Gly Gln Gly Leu Glu Trp Ile
      35
                         40
Gly Trp Ile Tyr Pro Gly Asp Gly Ser Thr Lys Tyr Asn Glu Lys Phe
                    55
   50
                                      60
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Lys Gly Lys Ala Thr Leu Thr Val Asp Lys Ser Ser Thr Thr Val Tyr

65 70 75 80

Met Gln Leu Ser Ser Leu Thr Ser Glu Asn Ser Ala Val Tyr Phe Cys 85 90 95

Ala Arg Gly Gly Lys Tyr Phe Asp Tyr Trp Gly Gln Gly Thr Thr Leu 100 105 110

Thr Val Ser Thr Gly Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly 115 120 125

Gly Gly Ser Ala Leu Asp Ile Val Met Thr Gln Ser Pro Lys Phe Met 130 135 140

Asn Val Ala Thr Asn Val Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ser 165 170 175

Pro Lys Pro Leu Thr Tyr Ser Ala Ser Phe Arg Ser Ser Gly Val Pro 180 185 190

Asp Arg Phe Thr Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile 195 200 205

Ser Asn Val Gln Ser Glu Asp Leu Ala Glu Tyr Phe Cys Gln Gln Tyr 210 215 220

Asn Ser Tyr Pro Tyr Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys 225 230 235 240

Ala Ala Ala Gly Ala Pro Val Pro Tyr Pro Asp Pro Leu Glu Pro Arg \$245\$ \$250\$ \$255\$

Gly Ala Ala Ser Ala Trp Ser His Pro Gln Phe Glu Lys 260 265

<210> 2

<211> 288

<212> PRT

<213> Mus sp.

<400> 2

Glu 1	Val	Gln	Leu	Leu 5	Glu	Ser	Gly	Gly	Gly 10	Leu	Val	Gln	Pro	Gly 15	Gly
Ser	Leu	Arg	Leu 20	Ser	Суз	Ala	Ala	Ser 25	Gly	Phe	Thr	Phe	Ser 30	Ser	Tyr
Ala	Met	Ser 35	Trp	Val	Arg	Gln	Ala 40	Pro	Gly	Lys	Gly	Leu 45	Glu	Trp	Val
Ser	Ala 50	Ile	Ser	Gly	Ser	Gly 55	Gly	Ser	Thr	Tyr	Tyr 60	Ala	Asp	Ser	Val
Lys 65	Gly	Arg	Phe	Thr	Ile 70	Ser	Arg	Asp	Asn	Ser 75	Lys	Asn	Thr	Leu	Tyr 80
				85					90			Val		95	
			100					105				Arg	110		
		115					120				_	Arg 125			
	130				-	135	-	_		_	140	Gly	_		-
145		_			150					155		Ser			160
_			-	165					170	-		Phe		175	
		_	180					185				Pro	190		
		195					200					205 Ala			
- 10	210	9	2110	201	~±y	215	-12	201	о±у		220		201		

Ile Ser Gly Leu Arg Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ser

225 230 235 240

Trp Asp Asp Ser Leu Thr Trp Val Phe Gly Gly Gly Thr Lys Val Thr
245 250 255

Val Leu Gly Ala Ala Ala Gly Ala Pro Val Pro Tyr Pro Asp Pro Leu 260 265 270

Glu Pro Arg Gly Ala Ala Ser Ala Trp Ser His Pro Gln Phe Glu Lys 275 280 285

<210> 3

<211> 810

<212> DNA

<213> Mus sp.

<400> 3

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<210> 4

<211> 867

<212> DNA

<213> Mus sp.

<400> 4

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ccagggaagg	ggctggagtg	ggtctcagct	attagtggta	gtggtggtag	cacatactac	180
gcagactccg	tgaagggccg	gttcaccatc	tccagagaca	attccaagaa	cacgctgtat	240
ctgcaaatga	acagcctgag	agccgaggac	acggccgtgt	attactgtgc	gcgagactcg	300
gggctacagc	agggaccccg	ccgaagaggg	gcccgagtaa	atttctccta	ctacggtctg	360
gacgtctggg	ggcgggggac	cacggtcacc	gtctcgagtg	gaggcggcgg	ttcaggcgga	420
ggtggctctg	gcggtggcgg	aagtgcacag	gctgtgctga	ctcagccgtc	ctcagcgtct	480
gggacccccg	ggcagagggt	caccatctct	tgttctggaa	gcaactccaa	catcggacgc	540
aattatgtat	tctggtacca	gcagttccca	ggaacggccc	ccaaaatcct	catctacagg	600
aacaatcagc	ggccctcagg	ggtccctgac	cgattctctg	gctccaagtc	tggcacatca	660
gcctccctgg	ccatcagtgg	gctccggtcc	gaggatgagg	ctgattatta	ctgtgcatca	720
tgggatgaca	gcctgacttg	ggtgttcggc	ggagggacca	aggtcaccgt	cctaggtgcg	780
gccgcaggtg	cgccggtgcc	gtatccagat	ccgctggaac	cgcgtggggc	cgcaagcgct	840
tggagccacc	cgcagttcga	aaaataa				867

<210> 5

<211> 246

<212> PRT

<213> Homo sapiens

<400> 5

Ala Ser Val Lys Val Ser Cys Lys Thr Ser Gly Tyr Thr Phe Ile Ala 1 5 10 15

Tyr Tyr Ile His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp 20 25 30

Met Gly Arg Ile Asn Pro Asn Thr Gly Gly Ile Asn Leu Ala Gln Lys 35 40 45

Phe Gln Gly Arg Val Thr Val Thr Arg Asp Thr Ser Ile Ser Thr Ala 50 55 60

His Met Glu Leu Ser Arg Leu Ser Ser Asp Asp Thr Ala Val Tyr Tyr 65 70 75 80

90 95

Val Thr Ala Val Gly Met Asp Val Trp Gly Arg Gly Thr Leu Val Thr
100 105 110

Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly 115 120 125

Gly Ser Ala Gln Ser Val Val Thr Gln Pro Pro Ser Met Ser Gly Thr 130 135 140

Pro Gly Gln Arg Val Thr Ile Ser Cys Ser Gly Ser Arg Ser Asn Ile 145 150 155 160

Gly Arg Asn Tyr Val Tyr Trp Tyr Gln Gln Phe Pro Gly Thr Ala Pro \$165\$ \$170\$ \$175\$

Lys Leu Leu Ile Tyr Arg Asn Asn Glu Arg Pro Ser Gly Val Pro Asp 180 185 190

Arg Phe Ser Ala Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser 195 200 205

Gly Leu Arg Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Thr Trp Asp 210 215 220

Asp Ser Leu Ser Gly Thr Trp Val Phe Gly Gly Gly Thr Lys Leu Thr 225 230 235 235

Val Leu Gly Ala Ala Ala 245

<210> 6

<211> 248

<212> PRT

<213> Homo sapiens

<400> 6

Leu Leu Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly Ser Leu Arg

1 10 15

Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr Ala Met Ser 20 25 30

Trp	Val	Arg 35	Gln	Ala	Pro	Gly	Lys 40	Gly	Leu	Glu	Trp	Val 45	Ser	Ala	Ile
Ser	Gly 50	Ser	Gly	Gly	Ser	Thr 55	Tyr	Tyr	Ala	Asp	Ser 60	Val	Lys	Gly	Arg
Phe 65	Thr	Ile	Ser	Arg	Asp 70	Asn	Ser	Lys	Asn	Thr 75	Leu	Tyr	Leu	Gln	Met 80
Asn	Ser	Leu	Arg	Ala 85	Glu	Asp	Thr	Ala	Val 90	Tyr	Tyr	Суз	Ala	Arg 95	Gly
Gly	Gly	Arg	Tyr 100	Asp	Ser	Ser	His	Gly 105	Phe	Asp	Ser	Trp	Gly 110	Arg	Gly
Thr	Met	Val 115	Thr	Val	Ser	Ser	Gly 120	Gly	Gly	Gly	Ser	Gly 125	Gly	Gly	Gly
Ser	Gly 130	Gly	Gly	Gly	Ser	Ala 135	Leu	Ser	Tyr	Glu	Leu 140	Thr	Gln	Pro	Pro
Ser 145	Val	Ser	Val	Ala	Pro 150	Gly	Glu	Thr	Ala	Thr 155	Ile	Thr	Суз	Gly	Gly 160
Arg	Ser	Leu	Gly	Ser 165	Lys	Val	Val	His	Trp 170	Tyr	Gln	Gln	Lys	Pro 175	Gly
Gln	Ala	Pro	Thr 180	Leu	Val	Ile	Tyr	Tyr 185	Asp	Ser	Val	Arg	Pro 190	Ser	Gly
Val	Pro	Glu 195	Arg	Phe	Ser	Ala	Ser 200	Asn	Ser	Arg	Leu	Ser 205	Ala	Thr	Leu
Thr	Val 210	Ser	Arg	Val	Glu	Ala 215	Gly	Asp	Glu	Ala	Asp 220	Tyr	Tyr	Суз	Gln
Val 225	Trp	Asp	Arg	Ser	Ser 230	Asp	His	Tyr	Val	Phe 235	Gly	Thr	Gly	Thr	Lys 240
Leu	Thr	Val	Leu	Gly	Ala	Ala	Ala								

245

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<211> 248
<212> PRT
<213> Homo sapiens
<400> 7
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Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr Ala Met
       20 25 30
Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ser Ala
 35 40 45
Ile Ser Gly Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val Lys Gly
             55
Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr Leu Gln
65 70 75 80
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
                      90
          85
Asp Trp Arg Trp Gln Gln Phe Gly Gly Trp Phe Asp Pro Trp Gly Arg
      100 105 110
Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Ser Gly Gly Gly
  115 120
Gly Ser Gly Gly Gly Ser Ala Leu Glu Thr Thr Leu Thr Gln Ser
  130
           135 140
Pro Ala Thr Leu Ser Leu Ser Pro Gly Glu Thr Ala Thr Leu Phe Cys
145
     150 155 160
Arg Ala Ser Gln Ser Val Arg Asn Asn Leu Val Trp Tyr Gln Gln Lys
                  170
          165
                               175
Leu Gly Gln Ala Pro Arg Leu Leu Ile Phe Gly Ala Ser Thr Arg Ala
     180 185 190
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Ser Gly Ile Pro Asp Arg Phe Thr Gly Ser Gly Ser Gly Thr Asp Phe

195 200

Ser Leu Thr Ile Thr Lys Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr 210 215 220

Cys Gln Arg Tyr Gly Gly Phe Pro Ile Thr Phe Gly Gln Gly Thr Arg 225 230 230 235

Leu Glu Ile Lys Arg Ala Ala Ala 245

<210> 8

<211> 247

<212> PRT

<213> Homo sapiens

<400> 8

Gln Leu Val Gln Ser Gly Gly Gly Leu Val Gln Pro Gly Gly Ser Leu
1 5 10 15

Arg Leu Ala Cys Glu Ala Ser Gly Phe Arg Phe Ser Ser Tyr Gly Met 20 25 30

Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ser Ser 35 40 45

Met Ser Asp Ser Gly Ala Asn Thr Tyr Tyr Ala Asp Ser Val Lys Gly 50 60

Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Lys Met Leu Tyr Leu Gln 65 70 75 80

Met Ser Ser Leu Arg Gly Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr 85 90 95

Leu Phe Arg Gly Ser Gly Tyr Val Arg His Trp Gly Arg Gly Thr Leu \$100\$ \$105\$ \$110\$

Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gly 115 120 125

Gly Gly Ser Ala Gln Ala Val Leu Thr Gln Pro Ser Ser Ala Ser 130 135 140

Gly Thr Pro Gly Gln Arg Val Ile Ile Ser Cys Ser Gly Ser Ser Ser 145 150 155 160

Asn Ile Ala Ser Asn Tyr Val Tyr Trp Tyr Gln Gln Leu Pro Gly Thr 170 Ala Pro Lys Leu Ieu Ile Ser Lys Asn Ser Arg Arg Pro Ser Gly Val 180 185 190 Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala 195 200 205 Ile Ser Glu Leu Arg Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ala 210 215 220 Trp Asp Asp Arg Leu Ser Gly Pro Ala Phe Gly Gly Gly Thr Lys Leu 230 235 Thr Val Leu Gly Ala Ala Ala 245 <210> 9 <211> 248 <212> PRT <213> Homo sapiens <400> 9 Lys Lys Pro Gly Ser Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly 10 15 Thr Phe Ser Ser Tyr Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln 25 20 30 Gly Leu Glu Trp Met Gly Gly Ile Ile Pro Met Ser Gly Thr Pro Asn 35 40 45 Tyr Ala Gln Lys Phe Gln Asp Arg Val Thr Ile Thr Ala Asp Lys Ser 55 50 Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr 65 70 75 80

Ala Val Tyr Tyr Cys Ala Arg Gly Gly Arg Tyr Val Asp Phe Gly Arg

Gly Pro Ser Tyr His Tyr Tyr Tyr Met Asp Val Trp Gly Arg Gly Thr

105

110

85 90

100

Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser 115 120 125

Gly Gly Gly Ser Ala Gln Ser Val Leu Thr Gln Pro Pro Ser Ala 130 $$135\$

Ser Asn Ile Gly Arg Asn Tyr Val Tyr Trp Tyr His Gl
n Leu Pro Gly $$16\,$